

DDESB-KT

5 July 2000

MEMORANDUM FOR ARMY BOARD MEMBER, COLONEL JAMES C. KING  
NAVY BOARD MEMBER, CAPTAIN MIKE HERB  
AIR FORCE BOARD MEMBER, MR. PAUL PRICE  
MARINE CORPS BOARD MEMBER, MR. JERRY MAZZA

SUBJECT: Approved Changes to - Hazard Division 1.2 Criteria,  
- HD 1.1 Hazardous Fragment Distances,  
- Primary Fragment Distances,  
- Criteria for Permissible Exposure to On-base Roads from  
HD 1.1 Airblast Overpressure and Definitions for  
“General Public” and “Installation Related Personnel,”  
and  
- Expected Blast Load from an Earth-covered Magazine

References: (a) DDESB-KT Memorandum dated February 8, 2000, Subject: Modifications to Proposed Changes to Hazard Division (HD) 1.2 Criteria, HD 1.1 Hazardous Fragment Distances, and Primary Fragment Distances

(b) DDESB-KT E-mail (Ward, Jerry M. Dr. – DDESB Secretariat) dated Friday, February 18, 2000 2:33 PM, Subject: FW: Board vote by correspondence – USAF comment on proposed “refinement” to the HD 1.1 criteria

(c) DDESB-KT Memorandum dated December 10, 1999, Subject: Proposed Criteria for Permissible Exposure to On-base Roads from Hazard Division (HD) 1.1 Airblast Overpressure and Definitions for “General Public” and “Installation Personnel” – ACTION MEMORANDUM

(d) DALO-AMA (DDESB-KT/10 Dec 99) 1<sup>st</sup> COL J.C. King/DSN 227-8455 dated May 25, 2000, Subject: Same as reference (c)

(e) DDESB-KT Memorandum dated February 11, 2000, Subject: Action Item from 319<sup>th</sup> Board meeting, “Expected Blast Load from an Earth-covered Magazine (ECM)”

(f) CNO/N411 Memorandum 8020 Ser N411C1/OU591113 dated February 10, 2000, Subject: Same as reference (c)

(g) HQ AFSC/SEW Memorandum dated February 25, 2000, Subject: Same as reference (a)

- (h) HQ AFSC/SEW Memorandum dated February 25, 2000, Subject: Same as reference (c) [Your memorandum dated Dec 10, 1999]
- (i) HQ AFSC/SEW Memorandum dated February 25, 2000, Subject: Same as reference (e) [Your memorandum dated Feb 11, 2000]
- (j) CNO/N411 Memorandum 8020 Ser N411C1/OU591127 dated February 29, 2000, Subject: Same as reference (a)
- (k) CNO/N11 Memorandum 8020 Ser N411C1/OU591128 dated February 29, 2000, Subject: Same as reference (e)
- (l) MARCORSYSCOM Memorandum 1000 AM-EES dated April 7, 2000, Subject: Vote by Correspondence
- (m) DALO-AMA (DDESB-KT/8 Feb 00) 1<sup>st</sup> COL J.C. King/DSN 227-8455, dated May 25, 2000, Subject: Same as reference (a)
- (n) DALO-AMA (DDESB-KT/11 Feb 00) 1<sup>st</sup> COL King/DSN 227-8455, dated May 25, 2000, Subject: Same as reference (e)
- (o) MCSC/USMC E-mail (Mazza, Mr. Jerry – Marine Corps Board Member) dated Friday, May 26, 2000 3:01 PM, Subject: RE: PTR—Again
- (p) AFSC/SEP E-mail (Price, Mr. Paul – Air Force Board Member) dated Monday, June 12, 2000 4:41 PM, Subject: PTR Issue
- (q) CNO/N411 E-mail (Herb, Capt. Mike – Navy Board member) dated Thursday, June 15, 2000 2:42 PM, Subject: RE: PTR – Again
- (r) DDESB-KT E-mail (Ward, Dr. Jerry M. – DDESB Secretariat) dated Monday, June 19, 2000 11:24 AM, Subject: FW: Approvals for the “votes for correspondence”

The subject changes submitted by reference (a) [as modified by reference (b)], reference (c) [as modified by reference (d)] and reference (e), have been approved by the Board by correspondence (references (d), (f), (g), (h), (i), (j), (k), (l), (m), (n), (o), (p) and (q)).

The approved changes to DoD 6055.9-STD are enclosed as Attachments (1) through (5).

Please note that the two editorial changes discussed in reference (r) and listed below, have been incorporated into the text for the approved changes provided in the attachments.

- Attachment (2) – Footnote (5) to Table C2.T1 “Hazard Division 1.1 Hazardous Fragment Distances” was changed to read:

"(5) For HD 1.1 ammunition and explosives inside structures capable of stopping primary fragments, use Table C9.T6B. Structures capable of stopping primary fragments include all earth-covered magazines (ECM), and heavy wall (H) and heavy wall/roof (H/R) aboveground sites (AGS), as defined in Table C9.T8."

- Attachment (3) – An entry was added to Table C5.T2 “Maximum Case Fragment Ranges for Selected Single Item Detonations” for the 40mm grenade (maximum fragment throw range of 345 ft).

Also, please note that during the 316<sup>th</sup> meeting the Board directed that the Services take the actions necessary to expeditiously implement the changes approved (at that time) for the Hazard Division (HD) 1.2 and HD 1.1 criteria – and that those changes must be completely implemented no later than October 1, 2003. That implementation policy applies to the three related changes approved by this correspondence; namely,

- Attachment (1) - HD 1.2 Criteria,
- Attachment (2) - HD 1.1 Hazardous Fragment Distances, and
- Attachment (3) - Primary Fragment Distances.

This approval with attachments will be posted on the Department of Defense Explosives Safety Board (DDESB) webpage: <http://www.hqda.army.mil/ddesb/esb.html>.

The point of contact is Dr. Jerry M. Ward – phone: DSN 325-2525, Commercial (703) 325-2525; Fax: (703) 325-6227 and E-mail: [Jerry.Ward@hqda.army.mil](mailto:Jerry.Ward@hqda.army.mil).

/s/Col Daniel T. Tompkins  
DANIEL T. TOMPKINS  
Colonel, USAF  
Chairman

#### Attachments

1. Hazard Division 1.2 Criteria, File: [hd12\(5Apr00\).pdf](#)
2. HD 1.1 Hazardous Fragment Distances, File: [hd11\(13Jun00\).pdf](#)
3. Primary Fragment Distances, File: [intdet\(2Jun00\).pdf](#)
4. Criteria for Permissible Exposure to On-base Roads from HD 1.1 Airblast Overpressure and Definitions for “General Public” and “Installation Related Personnel, ” File: [25MayVotePTRtext.pdf](#)
5. Expected Blast Load from an Earth-covered Magazine, File: [ecmloads2200.pdf](#)

cc:

Alternate Army Board Member, Mr. Gary Abrisz  
Alternate Navy Board Member, Mr. Richard Eldridge  
Alternate Air Force Board Member, Col Randall Strauss  
Alternate Marine Corps Member, Col Leif Larsen  
JCS (J-4-SMPED)  
DCMC (DCMC-OI)  
TRANSCOM (TCJ4-LT)  
USADAC/SMAAC-ES (Mr. Johnnie Cook)  
NOSSA/N711 (Mr. Richard T. Adams)

**ATTACHMENT (1)**

**Hazard Division (HD) 1.2 Criteria  
File hd12(5apr00).pdf**

**ATTACHMENT (2)**

**HD 1.1 Hazardous Fragment Distances  
File hd11(13Jun00).pdf**

**ATTACHMENT (3)**

**Primary Fragment Distances  
File intdet(2Jun00).pdf**

**ATTACHMENT (4)**

**Criteria for Permissible Exposure to On-base Roads from HD 1.1  
Airblast Overpressure and Definitions for “General Public” and  
“Installation Related Personnel”  
File 25MayVotePTRtext.pdf**



**ATTACHMENT (5)**

**Expected Blast Load from an Earth-covered Magazine (ECM)  
File ecmloads2200.pdf**